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**From:** Moore, Kendall  
**Sent:** Fri 4/22/2016 1:35:21 PM  
**Subject:** RE: Notes from today's call with Monroe, and my summary of their consultant's report

Great!! Thanks Michelle!

**From:** Mullin, Michelle  
**Sent:** Thursday, April 21, 2016 6:47 PM  
**To:** Moore, Kendall <moore.kendall@epa.gov>; Peachey, Robert <peachey.robert@epa.gov>; Ramanauskas, Peter <ramanauskas.peter@epa.gov>; Skadowski, Suzanne <Skadowski.Suzanne@epa.gov>  
**Subject:** Notes from today's call with Monroe, and my summary of their consultant's report

## ENFORCEMENT CONFIDENTIAL

Thanks for leading the call today, Kendall. Below are my notes. And below that is a detailed summary I put together of their consultant's report.

Notes from today's call:

4/21/16 call with Sky Valley

Devlin, John Mannix (Assistant Superintendent for the district)

Kendall Moore, Peter Ramanauskas R5

Michelle Mullin, Lisa McArthur R10

Kendall: talk about our own lab reports, school

Ballast 6 - Classroom D - previously spilled. 9300 ug/wipe and 25 ug/wipe

See lab data for full info

Some wipe samples in Classrooms were below cleanup standard, but still detected, indicates there was a cleanup, so other lights should be evaluated, may need additional attention.

Kendall- what is your plan now that you have the reports?

Devlin- not changing our approach- we are taking out all ballasts, even if they say "No PCBs", we are changing over to electronic. However, we will do additional cleaning.

John- we brought Argus Pacific in to develop a set of standards and guidelines and provide training to in district maintenance staff. Provided solvents, PPE, respirator protection and medical monitoring. They have begun the process of searching for any magnetic ballasts. Need to look into - do we go back into the areas and re-clean, whether there is any visible residue or not?

Kendall- what about the caulk and air levels?

John- PBS environmental believes that the low levels of contaminants are the cause of the PCBs in air. We are concentrating our efforts on the FLBs. In a few areas there is some very old carpet we will remove. Had already planned to remove the 9" vinyl tile, so if there are also PCBs on it, it will be pulled this summer. 20"x40" of carpet in Room 11 may require us to remove the unit ventilator and remediate the carpet and mastic and re-install the unit ventilator.

Kendall- and caulk?

John- have not had time to look at this yet.

Kendall- do you plan to have that conversation soon?

John- yes. Will talk with Greg from PBS in the near future. We've already begun addressing some of the issues in the report unrelated to PCBs. Begun a deep cleaning process, things of that nature.

Kendall- looks like your plan is to address the ballasts where we have concentrations > cleanup level by doing a re-cleaning of all the light fixtures throughout the school, correct?

Joh- yes

k: and you'll also do carpet removal, even if PCB levels are below action levels

J: we are looking into that. Not prepared to commit to that in Room 11. Will remove if above action level. If it's close we would want to get rid of it.

K: what is our action level Michelle and Peter?

P: would need to bulk sample and <1ppm

M: Agree, less than 1 ppm

K: plan for caulk?

J: consultant is looking into whether or not the caulk is doing what it is designed to do, is there EPA guidance?

K: Michelle, please forward PCB Q&A doc to John and Devlin. In terms of the rule, the PCB rule bans the use of PCBs in caulk over 50ppm. You'll see in the Q&A penalties for continued use of non-liquid PCBs in schools is a low enforcement priority. So we are very interested to see what the school district will do to address this voluntarily. Do you have a time frame for when you can get back to us in addressing the caulk and air samples?

J: Air samples will be greatly addressed by PCB ballast housing cleanup operation that is underway. By the time the work is done and testing re-done may be a few months. Will meet with consultant and have a discussion with consultant about caulk in about 2 weeks and need to present to school board.

D: Will EPA do that or do you want us to do it and give you the results?

K: We would like the school to do that

D: Also I'm assuming you'd also like the re-sampled fixture results too?

K: Yes

D: Could provide probably within about a month, consultant has a 2-3 week TAT on wipes.

K: Consultant says that caulk is not required to be removed. But it is an unauthorized use.

J: I gotta chuckle at the concept that millions of buildings are required to remove this caulk

K: Changing topics, we would wrap up your plan for remediation with a CAFO, with a penalty associated, due to leaks of PCBs that were not cleaned up to appropriate cleanup standard. Typically the way we do this for schools is if the school does the cleanup appropriately we remit the penalty in full. School in IN had a penalty for \$50k, once the school cleaned up we remitted the penalty to \$0, which was filed as an amendment to the CAFO. CAFO is signed by the EPA and the school district.

J: PBS report has already been shared with parents/teachers. Will withhold from sharing the EPA data until the report is finalized. Communicate with parents every 1-2 weeks. Parents are aware that we came in and we prepared a report.

K: You can release the results prior to the report. No reason why you couldn't share with the parents, right, Michelle?

M: I do not object and we would be happy that you are sharing information openly.

J: We will be providing information to the families

Here is my summary of the report:

- 76 wipe samples were collected across the school. (results on pg 179 or report)
- o Only 2 had detections of PCBs-

- in the gym, 3.4 ug/100cm<sup>2</sup> (Aroclor 1254) (below EPA threshold of 10 ug/100cm<sup>2</sup>)
- On the floor under a known PCB ballast leak in Room D of the Annex building. 516 ug/100cm<sup>2</sup> (Aroclor 1016). floor tile was disposed after analysis demonstrated PCB exceedance.
- 68 air samples were collected using TO-10a in the middle of the room during typical class activities (page 195 of report)
  - o 13 samples had detectable PCBs
- 7 samples >100 ng/m<sup>3</sup> (ELE for ages 1-3 years old) Montessori Science Prep (sample #005), Annex Hall East (sample #062) (Aroclor 1242), Annex Girls Restroom (sample #060) (Aroclor 1242), Room F (Aroclor 1242)
  - 3 samples >200 ng/m<sup>3</sup> (ELE for ages 3-6 years old) Rooms A (Aroclor 1242), D (Aroclor 1242), and Annex Hall West (sample #056) (Aroclor 1242)
  - 0 samples >300 ng/m<sup>3</sup> (ELE for ages 6 and above)
- Detections below any ELEs: Room 11 (Aroclor 1260), Gathering Place- West Office (Aroclor 1242), Large Gym (Aroclor 1254), Annex Room E- East, Annex Room E- West, Annex-Room C (Aroclor 1242)
  - Inconsistency in Aroclor detections – false positives?
  - Room 11 (Aroclor 1260) was further evaluated- no PCB ballasts or ballast residue observed. Room was clean with minimal accumulated dust or debris. Unit ventilator control compartments were dusty and dirty. Oil was leaking from electric motor. Report states that wipe samples were collected from each compartment and of the oil. However, data table shows results in mg/kg (pg 227). Low levels of PCBs were found in the left compartment (6.48 mg/kg Aroclor 1254) and the return – as stated in text (1.74 ug/wipe), however data table lists 1.74 mg/kg Aroclor 1254 in carpet mastic for room 11, and the leaking motor oil (0.68 mg/kg Aroclor 1254) There is an old piece of carpet under the unit, the rest of the floor is bare concrete. Consultant concluded that carpet must be source of PCBs from old ballast leaks, though carpet did not appear to be tested, according to text, though data table showed test results.
- Carpet tests (page 220 of report)
  - o 3 carpet pieces were tested from carpet that was removed from classrooms over Christmas break.
  - o Classrooms 8, 12 and East Pod Center.
- Classroom 8 had 6.51 mg/kg PCBs (Aroclor 1254). Other samples were ND.

• Paint, sealants, mastics (Section 3.17, pg 73/76 in the page finder, table of all results on page 220)

- o All damaged and suspected PCB containing paints, sealants and mastics were sampled.
- o 27 total samples
- o Some are described as "damaged white painted wood", or some combination of paint and substrate, not clear if the paint was sampled, or the substrate, or both.
- o Gray caulking on interior and exterior metal window and door frames on all buildings throughout campus: 1.03-5,730 mg/kg. Is that the interior and then the exterior sample results? Or the full range from ALL window and door frames? Or are they just noting that all window and door frames had this color caulk?
  - Sample #003 4,420 mg/kg (Aroclor 1254) Main office- west exterior metal window frame
  - Sample #004 1.04 mg/kg (Aroclor 1254) north pod, room 14 exterior metal door frame
- o Light gray caulking on exterior metal columns throughout campus - 5,530 mg/kg. Again- are they just noting that this color caulking exists on all exterior metal columns but only have one sample?
  - Sample #002 has this result for Aroclor 1254, Building 3- west exterior column
- o Caulk sample #001 gray caulk – metal frame 1,130 mg/kg (Aroclor 1254) – Building 3 West Window
- o Caulk sample #005 tan caulk 17.70 mg/kg (Aroclor 1016/1242) – South pod, room 4- exterior metal window frame
- o Caulk sample #006 brown caulk 8.83 mg/kg (Aroclor 1016/1254) – room 7 exterior door, interior metal frame
- o Caulk sample #007 brown caulk 3.26 mg/kg (Aroclor 1016/1254) – room 20 exterior door, interior metal frame
- o Caulk sample #008 gray caulk 3,660 mg/kg (Aroclor 1254) – room 7 interior metal window frame
- o Caulk sample #009 gray caulk 5,730 mg/kg (Aroclor 1254) – room 20 interior metal window frame
- o Paint sample #007 White/Wood 1.80 mg/kg (Aroclor 1254) – is this the paint, or the paint and the wood? Exterior covered walkway, Office South Admin

- o Paint sample #013 light blue/concrete 0.196 (Aroclor 1254) – paint? Paint and concrete? Interior commons, northeast wall gathering place near kitchenette
- o Carpet mastic 1.74 mg/kg (Aroclor 1254) room 11
- o Carpet mastic 1.42 mg/kg (Aroclor 1254) North Pod-Center
- o Consultant report states that PCB caulk and paint does not need to be removed - incorrect, not authorized for ongoing use if PCB concentrations >50 ppm
- o Consultant report states that manifesting is only necessary if PCBs >10,000 ppm -incorrect, PCB bulk product waste must be manifested
- Suspect PCB residue was observed inside light fixtures in several areas:
  - o Administration building server room, adolescent Montessori prep room, Room D, music room- spa storage, large gym- boys locker room, room 10
- 21 recommendations are made related to improving HVAC systems- there is no exhaust in the woodshop, or over the café grill, or in the chemical fume hoods. Some of the kiln exhaust is being picked up into the return exchange. Many air inlets are blocked or caked with dust.
- 16 recommendations were made with regard to improper chemical use and storage in a variety of areas and Pod classrooms and lead based paint. Only one of these recommendations related to PCB light ballasts
- 32 total recommendations were made with regard to general housekeeping:
  - o 19 areas were noted as having poor housekeeping and improper storage of materials
  - o 21 areas were noted as having moderate to heavy dust
- 23 recommendations relate to fungal growths
- 6 recommendations relate to asbestos concerns
- 6 recommendations relate to construction concerns

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